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Charismatic leadership, intra-team communication quality, and team performance: The role of average leadership perceptions and their homogeneity

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ABSTRACT

This team-level study investigated whether team members' perceptions of charismatic leadership are related to team performance via team communication quality. We differentiated between average perceptions of charismatic leadership (APCL) and within-team homogeneity in team members' perceptions of charismatic leadership (HPCL). We hypothesized that APCL and HPCL would be positively related to team performance via intra-team communication quality. In addition, we hypothesized that the positive indirect effect of APCL on team performance would be moderated by HPCL. Our mediation and conditional mediation hypotheses were tested using data collected at two time points in a sample of 54 work teams. The results showed that the indirect effect of HPCL on team performance via intra-team communication quality was statistically significant, whereas the indirect effect of APCL was moderated by HPCL (the indirect effect of APCL was significant only at medium and high levels of HPCL).

There is a continuous increase in teamwork in organizations worldwide because teams are better equipped than individuals to perform complex tasks and reach organizational goals (Kozlowski & Bell, 2013; O'Neill & Salas, 2018). In this context, team leaders (i.e., team managers) have become key agents in ensuring team goal achievement and performance (Gardner et al., 2012; Salas et al., 2015; Weberg & Weberg, 2014; Wilderom et al., 2012). Charisma is a key characteristic of leaders that has been found to have an influence on team performance (Avolio & Yammarino, 2013, pp. 27–33; Banks et al., 2017; Nassif et al., 2021). Charismatic leaders articulate and help build a positive vision for the future. They instill trust in their followers (i.e., team members), foster an impression of the importance of the followers' mission, inspire a feeling of pride in the followers about their work achievements, set high expectations, and show confidence that these expectations can be achieved (Bass, 1985; Le Blanc et al., 2021; Yammarino et al., 2012). Charismatic leadership is the result of an attribution based on followers' perceptions of their leaders' behavior (Bien et al., 2014; Bligh et al., 2018; Uhl; Ito et al., 2020, pp. 324–336).

Previous meta-analytical research has shown that charismatic leadership is positively related to group or firm performance (Banks et al., 2017). However, as Antonakis et al. (2016) state in their review, we still do not know what mediating mechanisms transmit the influence of

charismatic leadership on team performance. This state-of-the-art is problematic because it shows that we do not fully understand *why* charismatic leadership influences team performance.

To obtain an indicator of charismatic leadership, the standard practice is to average team members' perceptions of their leader's charisma (Harrison & Klein, 2007), following a consensus composition model (Chan, 1998). This practice yields an indicator of a shared unit construct (Kozlowski & Klein, 2000). However, because leaders' charisma is based on followers' perceptions, it is reasonable to expect some heterogeneity in these perceptions (Antonakis, 2012; Biemann et al., 2012; Harrison & Klein, 2007; Lindell & Brandt, 2000). This variability, in fact, may provide meaningful information that helps understand the effects of charismatic leadership on teams. Indeed, different scholars have recommended that when studying aggregate constructs based on team members' perceptions, such as charismatic leadership, both the arithmetic mean (an indicator of a shared construct) and the within-team variability (an indicator of a dispersion construct) should be modeled (Chen et al., 2005; Klein et al., 2001; Lindell & Brandt, 2000). Shared constructs (such as team members' average perceptions of charismatic leadership [APCL]) reflect the elements (e.g., charismatic leadership perceptions) common to or shared by team members. Dispersion constructs (such as homogeneity in perceptions of

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charismatic leadership, HPCL) reflect within-team differences in these elements. Thus, APCL, as a shared construct, and HPCL, as a dispersion construct, are qualitatively distinct and operationalized differently.

However, despite these differences and the recommendation mentioned above, research has typically ignored the role played by HPCL in predicting key organizational outcomes, such as team performance, and the potential underlying mechanisms (i.e., mediators) that explain this relationship. This omission is surprising because previous research has shown that dispersion leadership constructs can enhance our understanding of the team leadership-team outcome relationship (e.g., leader-member exchange differentiation; see [González-Romá, 2016](#); [Le Blanc & González-Romá, 2012](#)). Thus, disregarding HPCL is worrisome if we aim to understand charismatic leadership as a team-level phenomenon. Theoretically, addressing this omission can give us a more comprehensive understanding of charismatic leadership's role in the functioning and outcomes of teams because it can uncover HPCL as a facet of charismatic leadership with specific influences beyond those of average charismatic leadership. Moreover, from a practical perspective, if HPCL is a relevant factor in team functioning, strategies to promote it can be suggested to team managers.

Our study contributes to filling the gaps identified above by incorporating HPCL when analyzing some important underlying mechanisms that link charismatic leadership to team performance. In this study, we differentiate between the team members' APCL, the homogeneity of these perceptions (HPCL) and the interaction between them, and the way these three components impact team performance, defined as the quality of processes and behaviors oriented toward goal achievement ([Motowidlo, 2003](#)). Additionally, following different authors' calls for more knowledge about the mechanisms through which perceptions of a leader's charisma influence team performance ([Antonakis et al., 2016](#); [Yammarino et al., 2004](#)), we incorporate intra-team communication quality as an important mediating mechanism. We focus on intra-team communication quality (i.e., the extent to which communication among team members is clear, effective, complete, fluent, and on time) because it is a key team process for team performance ([González-Romá & Hernández, 2014](#); [Kozlowski & Bell, 2003](#)). Communication serves as a support mechanism for other team processes, such as team members' coordination and problem solving ([Gibson, 2001](#); [Kozlowski & Ilgen, 2006](#)). When team communication quality is high, it diminishes the need for high communication quantity, which then liberates cognitive resources to focus on the task at hand and, consequently, fosters higher performance ([MacMillan, Hambrick, & Day, 1982](#)). Finally, as we argue below, team communication can be influenced by the average perceptions of charisma, the homogeneity of these perceptions, and the interactions among them.

We expect to make several contributions to the field of charismatic leadership with this research. First, from a theoretical perspective, by incorporating HPCL, we expand the conceptualization of charismatic leadership as a team-level phenomenon that can be studied by using not only the average perception of charismatic leadership but also the intra-team variability in these perceptions. Second, by incorporating intra-team communication quality as a mediator, we increase our knowledge about the mechanisms through which charismatic leadership fosters team performance. Thus, our study contributes to improving our understanding of why charismatic leadership is related to team performance. Finally, by analyzing the moderation effects of HPCL, we also clarify *when* and *how* it influences the relationship between charismatic leadership and team performance via team communication quality. From a practical perspective, the examination of leadership effects at the team level might be particularly relevant for today's organizations, which organize work around teams. Particularly, considering the evidence that shows that charisma can be taught ([Antonakis, 2017](#); [Antonakis et al., 2011](#)), the results of the study can be used to design intervention strategies that promote high and homogeneous perceptions of the leader's charisma within teams to further enhance intra-team communication quality and performance.

1. APCL and team performance: the mediating role of intra-team communication quality

We posit that APCL is positively related to intra-team communication quality. Charismatic leaders have good communication skills ([Tucker, 1968](#), pp. 731–756). In fact, expressive communication can be considered one of the key characteristics of charismatic leaders ([Antonakis et al., 2016](#)). Team leaders use their communication skills to inform team members about their vision of the team and the importance of its mission, as well as the actions in which team members should invest time and effort, and show confidence in team members' capabilities ([Antonakis et al., 2016](#)). Moreover, charismatic leaders use different communication techniques (e.g., verbal, non-verbal, and symbolic by means of metaphors) to communicate with their team members ([Den Hartog & Verburg, 1997](#); [Shamir et al., 1994](#)). An empirical study conducted by [de Vries et al. \(2010\)](#) supported these ideas. They found that charismatic leadership is “to a considerable extent grounded in communication styles” (p. 376) and concluded that it is a communicative leadership style. Specifically, they observed that “charismatic leaders are characterized by an assured, supportive, argumentative, precise, and verbally non-aggressive communication style” (p. 376).

Because of their position and power, team leaders are important role models for team members. Based on social learning theory ([Bandura, 1973](#)), we posit that because charismatic leaders usually enact effective communication skills, techniques, and behaviors in their interactions with team members, the latter can learn and put them into practice, thereby contributing to improving the quality of intra-team communication.

We also posit that team communication quality is positively related to team performance. To function adequately, perform well, and achieve their team goals, “team members must effectively communicate with each other for multiple purposes, such as coordinating action, providing and receiving feedback, and solving team problems” ([González-Romá & Hernández, 2014](#), p. 1047). Team communication also allows team members to obtain and share new information and knowledge about important team matters (e.g., work methods and resources) that can contribute to team performance ([Mesmer-Magnus & DeChurch, 2009](#)). All of this makes team communication a crucial process to achieve good performance ([Salas et al., 2005](#)). There is empirical evidence supporting the relationship between team communication and team performance. In their meta-analysis, [Marlow et al. \(2018\)](#) found a statistically significant positive correlation corrected for unreliability ($\rho = .36$).

Considering the arguments presented above, we expect the relationship between average perceptions of leaders' charisma and team performance to be mediated by intra-team communication quality. Thus, we hypothesize the following:

Hypothesis 1. Team members' APCL will have a positive indirect effect on team performance via intra-team communication quality. Specifically, APCL will be positively related to intra-team communication quality, which, in turn, will be positively related to team performance.

2. Homogeneity in the perceptions of charismatic leadership and team performance

As pointed out earlier, because charismatic leadership is based on followers' attributions ([Conger & Kanungo, 1987](#)) (i.e., followers' perceptions of their leaders), it is reasonable to expect some heterogeneity in the way team members perceive their leader's charisma ([Chen et al., 2013](#); [Biemann et al., 2012](#); [Graen & Uhl-Bien, 1995](#); [Lindell & Brandt, 2000](#)). Different followers may interpret their leaders' behavior differently in different situations, thus bringing some heterogeneity to intra-team perceptions of leaders' charisma. This may occur for a variety of reasons. Employees may compare their leader's behavior to their own idea of how an ideal leader should behave, and so their perception of their leader's behavior would be filtered through this individual ideal

(Foti et al., 2012). Likewise, leaders may find it challenging to demonstrate charismatic qualities to all the members of the team in the same way (Walter & Bruch, 2008), which may also produce discrepancies in team members' perceptions of their leaders' charisma. Because charismatic leadership is validated only by the perceptions of followers, within-team variations in these perceptions should not merely be considered error variance (Mathieu et al., 2008). Thus, research on charismatic leadership at a team level should also pay attention to dispersion-composition models that consider within-team variance in perceptions of charisma as a meaningful higher-level construct. Therefore, HPCL should also be modeled when focusing on charismatic leadership (Cole et al., 2010).

Dispersion constructs are relatively rare in the leadership literature. However, recent findings have shown that dispersion constructs in leadership topics, such as Leader-Member-Exchange (LMX) differentiation (Boies & Howell, 2006; Le Blanc & González-Romá, 2012) and consensus (i.e., homogeneity) in perceptions of transformational leadership (of which charisma is a key component) (Cole et al., 2011), can impact team performance through mechanisms such as team empowerment (Cole et al., 2011). These results support suggestions by Lindell and Brandt (2000) that the absence of agreement among team members about leadership attributions can harm team processes such as team coordination and team communication, which are expected to influence team outcomes such as performance (Bliese & Halverson, 1998).

In this study, we argue that HPCL fosters intra-team communication quality. This relationship is based on the similarity-attraction theory (Byrne, 1971). This theory highlights the reinforcing value of perceptual similarity. When team members have similar perceptions about an important issue in their work (e.g., the team leader), the reinforcement of one member's views by other team members will have positive consequences because interactions with team members with similar views reinforce members' beliefs (Harrison & Klein, 2007). Thus, the degree to which team members have similar beliefs and views about their leaders may provide a solid basis for interpersonal attraction (Byrne, 1971; Williams & O'Reilly, 1998), which should facilitate intra-team communication quality (Liu et al., 2012). In contrast, experiences of dissimilarity have been shown to result in factionalism, message distortion, and other communication difficulties (Barnlund & Harland, 1963; Triandis, 1960).

Taking all these arguments into consideration, we expect HPCL to be positively related to intra-team communication quality. In addition, considering the arguments and empirical evidence presented above supporting a positive relationship between intra-team communication quality and team performance, we propose that, when controlling for average perceptions of leaders' charisma, HPCL will have an indirect effect on team performance via intra-team communication quality. Thus, we hypothesize the following:

Hypothesis 2. Team members' HPCL will have a positive indirect effect on team performance via intra-team communication quality. Specifically, HPCL will be positively related to intra-team communication quality, which, in turn, will be positively related to team performance.

2.1. The moderator role of HPCL

Thus far, we have argued that both average team members' perceptions of leaders' charisma and intra-team homogeneity in these perceptions will have an indirect effect on team performance via intra-team communication quality. Next, we posit that HPCL moderates the direct relationship between APCL and intra-team communication quality, and the indirect effect of the former variable on team performance via communication quality. The scant research on dispersion constructs in leadership research (e.g., Boies & Howell, 2006; Cole et al., 2011; González-Romá & Le Blanc, 2019; Le Blanc & González-Romá, 2012) has shown the value of modeling the moderator role of homogeneity in leadership perceptions in predicting important outcomes such as team

performance, team potency, and commitment.

Focusing on charismatic leadership, Klein and House (1995) suggested that the relationship between charismatic leadership and team outcomes should be moderated by homogeneity in subordinates' perceptions of charismatic leadership. The moderator role of HPCL in the relationship between APCL and team communication quality can be justified as follows. Low homogeneity in charismatic leadership perceptions within a team may produce friction and tension among team members because they hold differing views about leader behavior (Feinberg et al., 2005). Friction and tension within the team may hinder the role of a charismatic leader as a communicator role model because, in these circumstances, the social environment within the team is not appropriate for impacting how team members communicate. This social environment may interfere with and attenuate the role-modeling effect played by charismatic leaders' effective communication skills and behaviors that foster team communication quality. However, high homogeneity in charismatic leadership perceptions creates a positive social environment because "there is no need for team members to challenge other members' leadership attributions because each of their positions is equivalent" (Cole et al., 2011, p. 385). Under these conditions, the outcomes associated with charismatic leadership are more predictable, and its influence is intensified (Cole et al., 2011; Feinberg et al., 2005; Mischel, 1973). Therefore, HPCL should moderate the relationship between APCL and team communication quality, so that when HPCL is high, the relationship is enhanced, whereas when HPCL is low, the relationship is weakened.

Considering this moderation effect along with Hypothesis 1, we posit that the strength of the positive indirect effect of APCL is expected to be conditional on HPCL. Thus, we propose our third and final hypothesis:

Hypothesis 3. HPCL will moderate the positive indirect effect of APCL on team performance via team communication quality, so that when HPCL is high, the indirect effect of APCL is enhanced, whereas when HPCL is low, the indirect effect is weakened.

The proposed research model that includes our hypotheses is shown in Fig. 1. This model is congruent with the input-process-output model (Hackman, 1987; Kozlowski, Watola, Jensen, Kim, & Botero, 2008). The team process considered (team communication) is posited to convey the influence of the team inputs examined (APCL and HPCL) on the team outcome considered (team performance).

3. Method

3.1. Participants

Data were collected at two different time points with a gap of 6 months. At Time 1 (T1), 517 bank employees of 111 bank branches belonging to two different organizations filled out the questionnaire. At Time 2 (T2), 455 employees of 110 bank branches of the same organizations completed the questionnaire. Teams with at least three respondents at T1 were kept for the analyses, and in order to ensure enough team composition stability over time, only teams with a team member stability rate of .50 and above were selected (average final stability rate = 0.85, SD = 0.14). We also discarded teams that changed leadership between the two measurement points to make sure that the "effects" of charismatic leadership were due to the team manager in question.

After applying these restrictions, the final sample consisted of 244 bank employees grouped in 54 branches (i.e., work teams) of two savings banks located in the same geographical area in Spain. The branches of the two banks had similar missions, sizes, and structures. Of 54 branches, 29 (56%) belonged to one bank and 23 (44%) to the other. According to Guzzo and Dickson (1996), teams can be defined as groups of people who have interdependent roles, share common goals, and interact with each other to achieve these goals, and they typically have a formal leader (i.e., team manager). Although managers were part of the

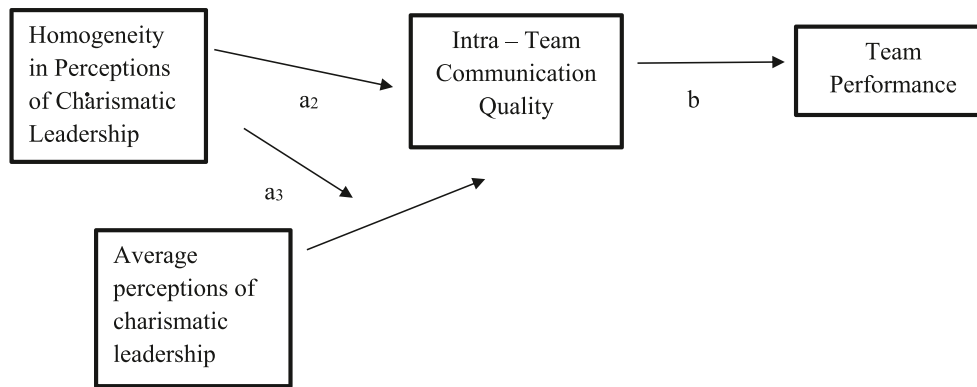


Fig. 1. The research model

Note: For simplicity, control variables are not included in the model

H1: $a_1 \cdot b$; H2: $a_2 \cdot b$ (tested simultaneously before adding a_3); H3: $a_3 \cdot b$.

branch, they had a separate office from the rest of branch members and different levels and types of responsibilities, such as serving as a carrier of communication between the work team and the organization. In addition, branch members shared common goals established at the branch level, such as a specific volume of business or the number of loans, and they had to interact to achieve these goals. Taking these considerations into account, it is reasonable to assume that bank branches can be considered work teams.

Among the team members, 57% were male. We presented different age intervals to participants (<25; 25–36; 36–45; 46–55; >55), and most of them were between 36 and 45 (30%) and 46 and 55 (37%) years old. The average response rate for T1 was 95%, and for T2, 88%. At T1, team tenure was 23 months on average (SD = 38.23 months). The average tenure of the leaders at T1 was 40.76 months (SD = 39.86 months). Eighty-five percent of leaders were male (46 in all) and 15% female (8 in all).

3.2. Procedure

The researchers liaised with personnel managers to set up and describe the data collection process. Trained administrators carried out the process. For both Time 1 and Time 2, the questionnaires were filled out during work time at the workers' respective workplaces. The questionnaires were delivered personally to those who missed the data-gathering sessions, and the assigned administrator later collected them. The process followed was the same at Time 1 and Time 2. Participation was voluntary, and anonymity and confidentiality of the responses were guaranteed at both times.

3.3. Measures

Charismatic leadership. It was measured at T1 by means of four items taken from Morales and Molero's (1995) adaptation of the Multifactor Leadership Questionnaire created by Bass and Avolio (1990). Items referred to team managers as formal leaders (e.g., "My team manager believes in and transmits the importance of our mission"), and they were responded to by team members on a Likert scale with six response options ranging between 1 ("Strongly disagree") and 6 ("Strongly agree"). These individual scores were used to compute both APCL and HPCL within teams.

To operationalize leaders' charisma, specifically APCL, individual responses were aggregated to the team level by taking the average team member ratings of their leaders' charisma. To justify the aggregation of the individual responses, we computed several coefficients and indices. Specifically, we computed the intra-class correlation coefficients (ICC(1) and ICC(2)) from a one-way ANOVA and the Average Deviation Index

(ADI) (Burke et al., 1999). ICC(1) is an indicator of interrater reliability and estimates the proportion of variance that resides at the team level. ICC(2) estimates the reliability of the team mean (Bliese, 2000). ADI is a pragmatic index of within-team interrater agreement that does not require modeling a null or random response variance (Burke & Dunlap, 2002). The upper limit criterion, according to Burke and Dunlap (2002), is $c/6$, where c is the number of response categories. The results obtained (ICC(1) = 0.15; ICC(2) = 0.46; and ADI = 0.67) can be considered satisfactory based on standard cutoff points (Bliese, 2000; Burke & Dunlap, 2002). Cronbach's alpha for aggregated scores was .94.

HPCL. It was measured at T1. We operationalized HPCL by computing the standard deviation in the within-team "charismatic leadership" individual scores multiplied by -1 . The standard deviation can be calculated quickly and is easy to understand in comparison with other measures of dispersion (Roberson et al., 2007). In addition, it has been shown to be a valid measure for representing the lack of consensus or agreement in the population (Schmidt & Hunter, 1989). Although the level of agreement was sufficient to average the scores, the results showed that there was also considerable variability in the level of HPCL (MEAN = -0.88 , SD = 0.38).

Intra-team communication quality. It was measured at T2 using a 5-item scale ("To what extent is the communication among the members of your team: 1. Clear, 2. Effective, 3. Complete, 4. Fluent, 5. On time?") (González-Romá & Hernández, 2014). Items were responded to on a 5-point graded scale ranging from 1. "Not at all" to 5. "Very much." Aggregation at the team level was justified (ICC(1) = 0.12; ICC(2) = 0.38; and ADI = 0.44). Cronbach's alpha for aggregated scores was .92.

Team performance. It was measured at T2 as rated by team members. We used a two-item scale ("How well do you think your team does the assigned work?" and "What is the quality of the work performed by your team?") based on Jehn and colleagues' "members' perceived group performance scale" (Jehn et al., 1999). The scale was responded to on a 5-point graded scale ranging from 1 ("Very bad") to 5 ("Very good"). Aggregation indices in this case were ICC(1) = 0.04, ICC(2) = 0.17; and ADI = 0.20. Although the ICCs are modest at best, some studies have suggested that ICC (1) values around 5% may be large enough to test hypotheses at the aggregated level (Finch & French, 2011; LeBreton & Senter, 2008). Reliability was estimated using the Spearman-Brown coefficient because there is evidence that this coefficient is more suitable than alpha for two-item scales (Eisinga et al., 2013). The Spearman-Brown coefficient for aggregate scores was .72.

To assess the validity of the scores obtained, we ran a three-factor Confirmatory Factor Analysis (CFA) of the team aggregated scores for charismatic leadership, intra-team communication quality, and team performance. Given that the item responses followed a normal distribution, we used maximum likelihood estimation methods. In addition, a

CFA based on Harman's single-factor test was run to test for potential common-method variance effects. The goodness-of-fit of the three-factor model was acceptable ($\chi^2 = 72.78$; $df = 41$; $p < .01$; $\chi^2/df = 1.78$; CFI = 0.93, TLI = 0.91, RMSEA = 0.12, SRMR = 0.05), whereas the goodness-of-fit of the single-factor model was poor ($\chi^2 = 272.06$; $df = 44$; $p < .01$; $\chi^2/df = 6.18$; CFI = 0.53, TLI = 0.41, RMSEA = 0.31, SRMR = 0.22). For the three-factor model, standardized factor loadings were statistically significant ($p < .01$) and ranged between .68 and .95, and factor correlations ranged between 0.22 and 0.66. Collectively, these results support the adequacy of the measurement instruments.

Control variables. Several control variables were introduced. First, we controlled for some relevant structural variables: the organization to which the bank branches belonged, team size, and team tenure. These last two variables have been shown to have an influence on work-team performance (Kang et al., 2006). Team size can influence team dynamics and performance, because of the availability of human contact, the frequency of interaction with other team members, and the availability of human resources (Brewer & Kramer, 1986; Smith et al., 1994; Wallmark, Eckerstein, Langered, & Holmqvist, 1973). Team tenure may affect team outcomes because longer tenure fosters coordination, learning, and control (Guzzo et al., 2022; Smith et al., 1994). Team size and tenure were measured by asking team managers how many individuals worked in the bank branch they managed and how many months they had been working together. Because bank branches belonged to two different organizations, we created a dummy variable to differentiate between them and control for its potential effects.

Second, some research suggests that team members are more likely to agree if they share some similarities, such as demographic characteristics (Rentsch & Klimoski, 2001). Thus, we included heterogeneity in three demographic variables (gender, age, and educational level) as potential control variables. Because these variables were measured using different categories, we used Blau's Index (1977) to capture demographic heterogeneity, where zero indicates no variability in the variable of interest.

Finally, we also controlled for the potential effects of leaders' tenure in leading the team because more tenured leaders have more opportunities to develop their leadership skills, and there is meta-analytical evidence that leaders' tenure is positively related to work-unit performance (Guzzo et al., 2022).

3.3.1. Analysis

Using maximum likelihood estimation methods, we tested all the hypotheses in our research model using path analysis with Mplus (Muthén & Muthén, 1998-2017). Regarding control variables, given the small number of teams and the complexity of the model, for the sake of parsimony, we decided to include in the regression equations only those variables that showed significant correlations with the variables in the proposed research model. Regarding the study hypotheses, we first tested Hypotheses 1 and 2 by fitting a model that included the indirect effects of APCL and HPCL on team performance. As recommended in the literature (e.g., James et al., 1982), we simultaneously tested for the effects of the two differentiated but correlated dimensions of charismatic leadership. Then, we tested Hypothesis 3 by fitting a second model that added the interaction term. APCL and HPCL were mean-centered before computing the interaction.

To conclude that there is a mediation effect, the indirect effect has to be statistically significant. The indirect effect is the product of the coefficients involved in the mediation chain ab , where a refers to the $X \rightarrow M$ coefficient, and b refers to the $M \rightarrow Y$ coefficient after controlling for X (Sobel, 1982) (where X is the independent variable, M is the mediator, and Y is the dependent variable). In our case, we tested two indirect effects: APCL \rightarrow intra-team communication quality \rightarrow team performance (a_1b in Fig. 1) and HPCL \rightarrow intra-team communication quality \rightarrow team performance (a_2b in Fig. 1), for Hypothesis 1 and Hypothesis 2, respectively. Considering that the product of regression coefficients does not follow a normal distribution, we tested the significance of indirect

effects using bootstrapping. Specifically, we bootstrapped 10,000 samples (e.g., MacKinnon et al., 2004; Williams & MacKinnon, 2008) with 95% Bias Corrected (BC) Confidence Intervals (CIs).

To test for the significance of the moderation effects proposed in Hypothesis 3, after adding the interaction term between APCL and HPCL, we tested the significance of the index of moderated mediation (Hayes, 2015) (a_3b in Fig. 1) by means of bootstrapping. A significant index of moderated mediation indicates that the indirect effect of APCL on team performance via intra-team communication quality is not equally strong for all the levels of HPCL. To gain a deeper understanding of the moderation effects of the predictor, and following Dawson's (2014) recommendation to avoid the use of specific values of the moderators (1SD below and above the corresponding means) when these values are not meaningful by themselves, we tested the conditional indirect effects of the average perceptions of leaders' charisma on team performance for all the different levels of HPCL by obtaining the regions of significance using 95% BC bootstrapped CIs.

4. Results

Means, standard deviations, and intercorrelations among the study variables are shown in Table 1. As Table 1 shows, none of the control variables showed significant correlations with any of the variables in the research model. Thus, none of them were introduced as covariates.

Table 2 presents the results of the model fitted to test Hypotheses 1 and 2. This model showed satisfactory fit ($\chi^2 = 0.20$; $df = 2$; $\chi^2/df = 0.10$; CFI = 1.00, TLI = 1.00, RMSEA = 0.00, SRMR = 0.012).¹

Hypothesis 1 proposed that APCL have a positive indirect effect on team performance via intra-team communication quality. Results showed that, whereas the second coefficient involved in the mediation path (intra-team communication quality \rightarrow team performance) was statistically significant ($b = 0.28$, $p < .05$), the first coefficient (APCL \rightarrow intra-team communication quality) was not ($a_1 = 0.20$; $p > .05$). The indirect effect a_1b ($0.12 \cdot 0.28$) was .03, and the BC Bootstrapped 95% CI included zero (-0.02 , 0.16). Thus, the results did not support Hypothesis 1.

Hypothesis 2 proposed that within-team HPCL has a positive indirect effect on team performance via intra-team communication quality. The coefficients involved in the mediation path (HPCL \rightarrow intra-team communication quality, $a_2 = 0.42$; and intra-team communication quality \rightarrow team performance, $b = 0.28$), were both statistically significant ($p < .01$). The indirect effect a_2b was 0.12 ($0.42 \cdot 0.28$), and the BC Bootstrapped 95% CI did not include zero (0.03 , 0.28). Thus, the results supported Hypothesis 2.

Finally, Hypothesis 3 proposed that HPCL moderates the indirect effect of APCL on team performance via team communication quality. The results supported this hypothesis. The model that included the interaction term showed a satisfactory fit ($\chi^2 = 0.24$; $df = 3$; $\chi^2/df = 0.08$; CFI = 1.00, TLI = 1.00, RMSEA = 0.00, SRMR = 0.015), and the inclusion of the interaction term (see Table 2) explained an additional 6% of the mediator variance ($p < .05$). In addition, the coefficient estimating the interaction was statistically significant $a_3 = 0.38$ ($p < .05$). Finally, the index of moderated mediation ($a_3b = 0.11$) was statistically significant because the BC Bootstrapped 95% CI did not include zero (0.002 ; 0.30). This result indicates that the indirect effect of APCL is moderated by HPCL, supporting Hypothesis 3.

¹ Although the model showed a satisfactory goodness-of-fit, we tested whether adding the direct paths from the predictors (APCL and HPCL) to the outcome (team performance) improved model fit. Although the model with these two additional direct paths was saturated ($d.f. = 0$), the improvement in fit was not statistically significant ($\Delta\chi^2 = 0.20$; $d.f. = 2$; $p > .05$). Moreover, the direct "effects" of APCL and HPCL on team performance were not statistically significant (-0.02 and 0.03 for APCL and HPCL, respectively; $p > .05$ in both cases).

Table 1
Means, standard deviations, intercorrelations, and reliability coefficients.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Organization	.46	.50	–										
2. Team size (T1)	4.52	2.01	–.24	–									
3. Team tenure (months) (T1)	23.00	38.23	.13	.35	–								
4. Blau Sex (T1)	.34	.17	.23	.12	.08	–							
5. Blau Age (T1)	.59	.20	–.13	.21	.23	.47**	–						
6. Blau Education (T1)	.62	.21	–.16	.26	.20	.28*	.53**	–					
7. Leader Tenure (months) (T1)	40.76	39.86	.25	.16	.50**	.11	.11	.19	–				
8. APCL (T1)	4.39	.61	.07	.02	.22	–.01	–.03	–.08	–.08	<i>(.94)</i>			
9. HPCL (T1)	–.88	.38	–.03	–.12	.05	.02	.05	–.08	–.12	.66**	–		
10. Intra-team communication quality (T2)	3.69	.42	.19	–.14	.00	–.07	–.22	–.25	.04	.44**	.51**	<i>(.92)</i>	
11. Team performance (T2)	4.04	.21	.03	.14	.01	.04	–.04	.05	.12	.20	.28*	.54**	<i>(.72)</i>

Note: * $p < .05$; ** $p < .01$.

T1: Time 1; T2: Time 2; APCL: Average Perceptions of Charismatic Leadership; HPCL: Homogeneity in Perceptions of Charismatic Leadership.

Italicized values between brackets along the main diagonal are Cronbach’s alphas, except for team performance, whose value refers to the Spearman-Brown coefficient.

Table 2
Path analysis: Coefficients and standard errors.

Model	Dependent Variable	Predictor	Coefficient	SE	R ²
MODEL 1: Mediated model	Intra-team communication quality	APCL	.12	.10	.27**
		HPCL	.42**	.17	
MODEL 2: Moderated mediated model/	Team Performance	Intra-team communication quality	.28**	.06	.29**
	Intra-team communication quality	APCL	.20	.11	.33**
		HPCL	.43**	.16	
		APCL*HPCL	.38*	.18	
	Team performance	Intra-team communication quality			.29**

Note: * $p < .05$; ** $p < .01$.

APCL: Average Perceptions of Charismatic Leadership; HPCL: Homogeneity in Perceptions of Charismatic Leadership.

To interpret the conditional indirect effects hypothesized in Hypothesis 3, in Fig. 2, we plotted the conditional indirect effect of APCL at different levels of HPCL, with the corresponding 95% confidence band. The region of significance for these conditional indirect effects shows that, as expected, the positive indirect effect of APCL becomes larger as the perceptions become more homogenous (i.e., higher HPCL) and requires a minimum level of HPCL to become statistically significant. As Fig. 2 shows, the indirect effect of APCL is statistically significant when HPCL is higher than -0.03 (0.03 units below the mean, which is -0.88 in our sample), and it is not significant for low homogeneity (HPCL values below -0.03).

5. Discussion

The widespread use of teams as building blocks in organizations has put a spotlight on team leaders (team managers) because they play a key role in fostering team performance. We focused on a particular type of leadership style, charismatic leadership, which has been linked to enhanced team performance (Banks et al., 2017). Considering that leaders’ charisma is based on followers’ perceptions of their leaders and that team members are expected to show different degrees of homogeneity in those perceptions (Biemann et al., 2012; Lindell & Brandt, 2000), we argued the need to integrate team members’ APCL and HPCL to fully understand the construct of charismatic leadership at a team level and its influence on key team outcomes such as team performance. In addition, we proposed that intra-team communication quality is a key

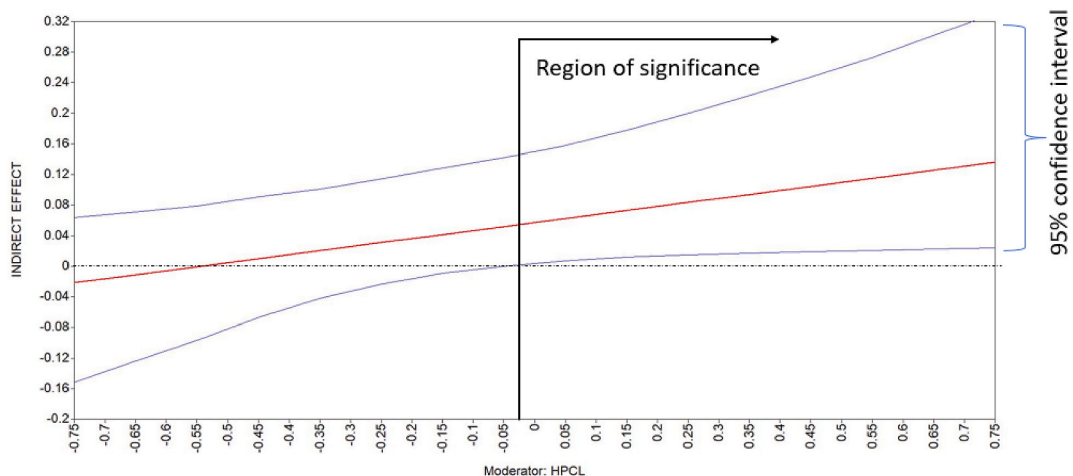


Fig. 2. The conditional indirect effect of APCL on team performance via team communication quality at different levels of HPCL
Note: Homogeneity in perceptions of charismatic leadership values are mean-centered scores.

underlying mechanism (i.e., mediator) that contributes to linking these two facets of charismatic leadership at the team level (APCL and HPCL) to team performance. Our results showed that HPCL and the interaction between APCL and HPCL have a positive indirect effect on team performance via team communication quality. As expected, higher HPCL strengthens the indirect effect of charismatic leadership perceptions on team performance via intra-team communication quality because it strengthens the relationship between charisma and intra-team communication quality. Next, we discuss the implications of our findings.

5.1. Theoretical implications

Our study has several implications for theory and research. First, responding to the call to understand the importance of dispersion constructs in leadership research (Boies & Howell, 2006; Chan, 1998; Cole et al., 2010; Le Blanc & González-Romá, 2012; Mathieu et al., 2008), our study contributes to enriching the construct of charismatic leadership by proposing and showing that *both* APCL and HPCL are important for team functioning (communication quality) and team performance. Focusing on HPCL, our study shows that it influences team communication quality and team performance beyond APCL. This finding suggests that teams whose members have disparate views about their leaders' charismatic behaviors tend to have worse communication quality, which in turn has a negative influence on team performance (Klein & House, 1995; Walter & Bruch, 2008). These results highlight the role of dispersion constructs such as HPCL in improving our understanding of the impact of leadership on team functioning and outcomes.

Second, in a recent review about charismatic leadership, Antonakis et al. (2016) stated that "to move the field forward ... we need to know more about the *mediators* and *moderators* of the charismatic effect" (p. 310). Focusing on mediators, our results showed that intra-team communication quality is a key underlying mechanism that links HPCL and the interaction between the two facets of charismatic leadership considered (APCL and HPCL) to team performance. Thus, our study contributes to advancing the field. Our findings suggest that similarity in team members' perceptions of charismatic leadership (i.e., HPCL) offers a solid basis for interpersonal attraction (Byrne, 1971) that facilitates intra-team communication quality, which in turn improves team performance. Moreover, when HPCL is medium or high, based on social learning (Bandura, 1973), charismatic leaders can model team members' behavior by enacting their effective communication skills. Thus, under these conditions, charismatic leaders can contribute to improving team communication quality and (indirectly) team performance. By uncovering this mediating mechanism, our study contributes to deepening our knowledge about *why* and *how* charismatic leadership influences team functioning (communication quality) and outcomes (performance).

Third, our study shows that HPCL plays a moderator role in the direct relationship between APCL and team communication quality, and the indirect effect of APCL on team performance via the investigated mediator. Thus, according to Antonakis et al.'s (2016) statement mentioned above, by identifying the moderator role of HPCL, our study also contributes to moving the field forward. Our findings clarify *when* APCL is (directly) related to team communication quality and (indirectly) to team performance. These relationships are observed when the level of HPCL is medium or high but not when the level of HPCL is low. When the latter occurs, friction and tension among team members may appear because they hold differing views about their leader's behavior (Feinberg et al., 2005). This social environment hinders the modeling role of charismatic leaders as good communicators and attenuates the direct impact of APCL on team communication quality and its indirect impact on team performance. However, when the level of HPCL is medium or high, there is a positive social environment among team members (Cole et al., 2011) because they hold similar views about a key team aspect (i.e., the leader) that reinforces each team member's view. In these conditions, the influence of APCL is intensified. Charismatic

leadership theories and models should consider this moderation effect to achieve a more comprehensive understanding of how the different facets examined here impact team processes (e.g., communication) and team performance.

On a related note, the observed interaction helps to understand why Hypothesis 1 was not supported (i.e., why the indirect effect of APCL on team performance via communication quality was not statistically significant)—this effect is only relevant when HPCL reaches medium to high levels. This finding stresses the need to improve our understanding of the boundary conditions that facilitate the functional influence of charismatic leadership at the team level (Antonakis et al., 2016).

5.2. Future research

Our results also have implications for future research. First, the finding that HPCL is important for team communication and performance should foster research on dispersion constructs related to other forms of leadership, such as authentic and servant leadership (Luthans & Avolio, 2003; Graham, 1991; Eva et al., 2019; Zhang et al., in press). Researchers should examine whether within-team homogeneity in perceptions of these forms of leadership is related to team processes, states, and outcomes. This will allow us to ascertain whether the role of dispersion constructs in leadership research is generalizable to different leadership styles.

Second, considering the positive influences shown by HPCL on team performance via intra-team communication quality, future research should investigate what drives homogeneity in perceptions of charismatic leadership within a team. Some research suggests that a team is more likely to agree if the members share some similarities (e.g., demographic characteristics) and the team has an optimal size (small enough to provide an opportunity for all members to interact with each other) (Rentsch & Klimoski, 2001). Other antecedents may come from the leaders themselves and their motivation to succeed as leaders (Barbuto, 2005). Given that organizational teams tend to homogenize over time (Schneider et al., 2000), it would be interesting to conduct a longitudinal study and observe how HPCL changes and what influences it.

5.3. Practical implications

Because charismatic behaviors can be taught (Antonakis et al., 2011; Richardson & Thayer, 1993), successful training programs may be used to foster high (homogeneous) perceptions of leaders' charisma among team members. Based on our results, this would enhance team performance via intra-team communication quality. In this regard, the Full Range Leadership Development (FRLD) model (Avolio & Bass, 1991) has been used by other researchers to develop and test various leadership training approaches. Using the FRLD model as a reference point, Parry and Sinha (2005) found that charismatic leadership can be improved through training.

Another training approach involves focusing on the trainability of the mediator. Because charismatic leadership is communicative and communication skills can be taught (de Vries et al., 2010), it is reasonable to expect that leadership training programs that focus on developing communication skills with team members would contribute to fostering team functioning and performance.

From the followers' perspective, and considering the functional influence of HPCL on team communication and performance, efforts should be made to increase HPCL within teams. Based on research on the antecedents of perceptual sharedness about team features (González-Romá & Peiró, 2014), augmenting social interaction within teams should lead to greater homogeneity in their perceptions of leader behaviors. Through social interactions, team members collectively build on and assign meaning to environmental features (Ashforth, 1985). Team members can increase their social interactions by planning formal and informal meetings to discuss team matters.

5.4. Limitations

Our study has some limitations that must be considered when interpreting the results. First, our results are based on a small sample composed of only one type of team (bank branches). These factors (sample size and team type) limit the generalizability of our findings. Future studies should cross-validate our results in larger and more heterogeneous samples composed of teams from other sectors (e.g., manufacturing, education, health). Our expectation is that similar results would be found because the same theoretical rationale should operate regarding the influence of APCL and HPCL. Supporting this idea, Jackson et al.'s (2013) meta-analysis (which analyzed samples from different sectors) found significant correlations between charismatic leadership, on the one hand, and task and group performance, on the other. Moreover, our teams operated in a Western country. Jackson et al.'s (2013) meta-analysis showed that the correlations between charismatic leadership and some outcomes (e.g., organizational commitment) vary across individualistic and collectivistic cultures. These cultures are typical in Western and Eastern countries, respectively. Thus, future studies should also cross-validate our findings in Eastern countries.

Second, data were collected from a single source (team members). Thus, common-method variance might have inflated the relationships between perceptions of charisma and team processes and outcomes. However, the fact that the study variables were measured at two different time points should reduce the impact of this problem to some extent.

On a related note, common-method variance does not seem to be strong because, as we showed in the Method section, Harman's test supported the adequacy of the multidimensional model underlying the study variables, compared with a single-factor model. Third, our team performance measure was based on team members' ratings. This might be problematic because individuals may inflate *self-ratings* of performance (e.g., Janssen & Van der Vegt, 2011; Pfeffer & Sutton, 2006). However, some scholars argue that these leniency effects are a) less serious and threatening when rating teams than when rating individual performance and b) especially important when assessing employees' performance levels, but less important when focusing on correlations among variables (Wall et al., 2004). Because we focused on team performance and its relationships with the other study variables, we do not think this problem seriously affected the results obtained. Nevertheless, future studies should replicate our findings using other sources to measure team performance (e.g., team leader ratings and objective indicators). Fourth, our mediator and outcome variables were measured at the same time point, which is not congruent with their place in our research model. This might have inflated their relationship. We separated six months in time APCL, HPCL, and their interaction from team communication quality because the examination of the relationship between these variables is new and requires sound empirical evidence, whereas the relationship between team communication quality and team performance has been documented in previous research and supported by meta-analytical evidence (Marlow et al., 2018). However, future studies that aim to replicate our findings should also separate in time the mediator from the outcome variable.

5.5. Conclusion

Our study shows that, at a team level of analysis, within-team HPCL and the interaction between APCL and HPCL has a significant influence on team performance via team communication quality. These results contribute to improving our understanding of the role of charismatic leadership in shaping team functioning and performance.

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Declaration of competing interest

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

Appendix

Items used to measure the study variables:

Charismatic leadership

My team manager ...

1. Shows enthusiasm for what I usually have to do
2. Enhances my optimism about the future
3. Believes in and transmits the importance of our mission
4. I am proud to work with him/her

The response scale ranged from 1. Strongly disagree and 6. Strongly agree.

Intra-team communication quality

To what extent is the communication among the members of your team:

1. Clear
2. Effective
3. Complete
4. Fluent
5. On time

The response scale ranged from 1. Not at all to 5. Very much.

Team performance

1. How well do you think your team does the assigned work?
2. What is the quality of the work performed by your team?

The response scale ranged from 1. Very bad to 5. Very good.

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